



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,019	10/15/2001	Thomas Lemaigre du Breuil	GEN-126	1611
23353	7590	03/07/2006	EXAMINER FLANDERS, ANDREW C	
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			ART UNIT 2644	PAPER NUMBER

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/976,019

Applicant(s)

DU BREUIL, THOMAS LEMAIGRE

Examiner

Andrew C. Flanders

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 15, 19-52 and 54-56 is/are pending in the application.
- 4a) Of the above claim(s) 19-43, 48 and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15, 47, 50-52 and 54-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as necessitated by Applicant's amendment.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 – 12, 15, 44 – 47, 50 – 52 and 54 – 56** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin (U.S. Patent 6,867,820)

Regarding **Claims 1 and 44**, Jin discloses:

A terminal for optimizing audio equipment (i.e. television display coupled with the speaker set; Fig. 1) for the reproduction of an audio signal that has source characteristic data and that is transmitted through a delivery channel (title and abstract), comprising:

a receiver that receives the audio signal and the source characteristic data (i.e. the DTV in Fig 1 has a CPU; col. 5 lines 9 – 20, 44 – 52 and col. 6 lines 10 – 19; that checks the number of speakers connected; Fig. 4 element S10, checks the content, number of channels, of the selected audio source; Fig. 4 element S20);

a memory that stores the source characteristic data and delivery channel capability data (Referring now to Fig. 4, Fig. 4 discloses a flow chart of operation for the device to determining the usable menus. A flow chart is a representation of a sequence of operations in a process; see the enclosed Dictionary.com definition for flowchart. A flow chart must complete each sequence before the next is to be completed. In this instance, step S10 must be finished before step S20, and step S20 must be completed before S30 and so on. Because operations taking place in step S30 depend on the data that is gathered from S10 and S20, and S30 is done at a later time than S10 and S20, there is an inherent storage of the data found in steps S10 and S20.); and

a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data and the delivery channel capability data and audio equipment data (i.e. the CPU determines the usable audio menus and displays them on the screen; col. 6 lines 1 – 5);

a control interface that couples the terminal with the audio equipment (i.e. the connection of the DTV to the speakers; Fig. 1; and the inherent connection of the processor to the display),

wherein the processor generates the optimized configuration data based on the audio equipment data (i.e. the CPU determines the usable audio menus and displays them on the screen; col. 6 lines 1 – 5);

and wherein the optimized configuration data is transmitted through the control interface to the audio equipment (i.e. the data is transmitted via the connection of the processor to the display).

Jin does not explicitly disclose to automatically, without any user input, configure the audio equipment based on the optimized configuration data.

However, it has been shown that making a manual process (such as the choosing of a particular audio configuration disclosed by Jin) automatic is a well known and obvious variant provided no difference occurs; See *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Automatically choosing the optimal setting without a user input would not result in a difference. In fact, as shown in col. 1 lines 55 – 65 of Jin, it is well known in the art that various configurations are optimal. As such, it would be desirable to choose the optimal result available.

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1, Jin further discloses:

a channel map for generating a program guide based on the source characteristic data and the delivery channel capability data (i.e. the system displays only the determined usable menus on the screen, the menus including the channel selections; col. 6 lines 3 – 4).

Regarding **Claim 3**, in addition to the elements stated above regarding claim 1, Jin further discloses:

wherein the memory contains delivery channel capability data for at least two delivery channels (As shown in claim 1, the memory for the delivery channel capability

Art Unit: 2644

is inherent, and as such, one of the possible channel outputs stored is a multi speaker arrangement; col. 6 lines 25 – 31).

Regarding **Claims 4, 45 and 46**, in addition to the elements stated above regarding claims 1 and 44, Jin further discloses:

wherein the memory comprises (i.e. the inherent memory as shown in claim 1):

a program guide database that stores the source characteristic data (the number of input channels found in S20 is inherently stored); and

a channel map database that stores the delivery channel capability data (the number of output channels found in S10 is inherently stored).

Regarding **Claim 5**, in addition to the elements stated above regarding claim 4, Jin further discloses:

wherein the terminal generates an assembled program guide based on the data in the program guide database and the channel map database (i.e. the system determines the present usable audio menus in step S30 from the data found in S10 and S20).

Regarding **Claim 6**, in addition to the elements stated above regarding claim 4, Jin further discloses:

wherein the program guide database stores the source characteristic data (i.e. the system inherently stores the characteristic data as shown in the rejection of claim 1).

Jin does not disclose storing the data in a source characteristic data field. However, the location of the storage in memory is a design choice by applicant. Locations of memory to which the data is being stored is irrelevant. Minor changes in programming allow for multiple areas of a memory to be used to efficiently store data without producing any new or unexpected results.

Regarding **Claim 7**, in addition to the elements stated above regarding claim 6, the modification of Jin further discloses:

wherein the audio signal is transmitted over one of at least two delivery channels (Fig. 1), and

wherein the program guide data base has at least one source characteristic field assigned to each delivery channel (as shown regarding claim 6, the data is saved for each channel, duplicating this method for multiple channels would have been an obvious implementation to one of ordinary skill in the art, see *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)).

Regarding **Claim 8**, in addition to the elements stated above regarding claim 4, Jin further discloses wherein the channel map database stores the delivery channel capability data (the system inherently stores the deliver channel data as shown in the rejection of claim 1).

Jin does not disclose storing the data in a delivery channel capability data field. However, the location of the storage in memory is a design choice by applicant.

Locations of memory to which the data is being stored is irrelevant. Minor changes in programming allow for multiple areas of a memory to be used to efficiently store data without producing any new or unexpected results.

Regarding **Claims 9 and 47**, in addition to the elements stated above regarding claims 8 and 46, the modification of Jin further discloses:

wherein the audio signal is transmitted over one of at least two delivery channels (Fig. 1), and

wherein the channel map data base has at least one delivery channel capability data field assigned to each delivery channel (as shown regarding claim 8, the data is saved for each channel, duplicating this method for multiple channels would have been an obvious implementation to one of ordinary skill in the art, see *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)).

Regarding **Claims 10, 50 and 52**, in addition to the elements stated regarding claims 1, 44 and 51, Jin further discloses:

wherein the optimized configuration data generated by the processor includes data that provides an alternate configuration if the delivery channel cannot support the source characteristic of the audio signal (i.e. the system determines the usable audio menus, which inherently contain the usable outputs for the given inputs in step S30 of Fig. 4).

Regarding **Claim 11** in addition to the elements stated above regarding claim 1, Jin further discloses: wherein the memory stores the audio equipment data that is used by the processor to generate the optimized configuration data (i.e. the system determines and inherently stores the number of speakers connected to the device in S10 of Fig. 4).

Regarding **Claim 12**, in addition to the elements stated above regarding claim 1, Jin further discloses an output interface that couples the processor to an output mechanism to present the optimized configuration data to a user (i.e. the system displays the usable menus in S40 of Fig. 4).

Regarding **Claims 15 and 51**, in addition to the elements stated above regarding claims 1 and 44, Jin further discloses:

wherein audio equipment data is transmitted from the audio equipment through the control interface to the terminal I (i.e. the CPU, located in the DTV determines when the a speaker is connected by checking the voltage level outputted by the speaker terminals; col. 1 lines 9 – 20; and the system determines the present usable audio menus in S30 of Fig. 4 and displays them to the user).

Regarding **Claims 54 and 55**, in addition to the elements stated above regarding claims 44 and 51, Jin further discloses wherein the optimized configuration

data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data (i.e. the device configures the menus that are selectable and sets up the output audio accordingly; See Fig. 4 and col. 6 lines 25 – 50).

Regarding **Claim 56**, in addition to the elements stated above regarding claim 44, Jin further discloses wherein the audio data is retrieved from a memory (Fig. 1 elements 3 and 4)

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7546. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acf



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**